

## PRO TIP CRITICAL AREA DESIGNATION AND PROTECTION

### Background

The [Washington State Growth Management Act \(GMA\)](#) and [Shoreline Management Act \(SMA\)](#) require the designation and protection of five critical areas:

- Wetlands
- Critical Aquifer Recharge Areas
- Fish & Wildlife Habitat Conservation Areas
- Geological Hazard Areas
- Frequently Flooded Areas

Critical areas provide valuable ecosystem services for people, animals and plants. Critical areas also protect people from hazards like floodways, landslides, and erosion hazards. When adopting critical areas protection standards, local governments must use of Best Available Science (BAS) to ensure no net loss of ecological function and values, as well as protect anadromous fish. [Lakewood Municipal Code \(LMC\) Title 14](#) and Title 16, the City's Shoreline Master Program (SMP) outline procedures, standards and protections for these critical areas.

### Technical Reports & Mapping Resources:

When development is proposed near water, wetlands, slopes, streams or wildlife habitat, an applicant may be required to provide additional information or reports as part of a development application. These reports shall be prepared by a qualified consultant or licensed professional.

Additionally, critical areas can be difficult to identify. When our public GIS mapping resources, located on the [online permit portal](#), show mapped critical areas or indicators of potential critical areas, a site investigation by a professional biologist, geologist, arborist or hydrogeologist will be needed.

### Technical Terms:

“Buffers” are boundaries that create setbacks from the edges of critical areas that provide the recommended spacing to avoid negative human and land use impacts to critical areas.

“No net loss of ecological function and value” means that all development projects proposed in, around, or near a critical area will not negatively impact them. Sometimes projects are unable to avoid impacting a critical area and so mitigation sequencing (described below) is used as a way to remediate potentially harmful impacts and causes the project to improve other aspects of the critical area to make up for the impacts caused by development. An example of this could be planting

new native plants to enhance the buffer area of a wetland to make up for a building being placed in a different portion of the wetland's buffer zone.

“Ordinary High-Water Mark (OHWM)” is often a transition zone between the water and terrestrial environment such as vegetation by examining the bed and banks and ascertaining where the presence and action of waters are so common and usual. It may naturally change overtime. In the case of properties with a bulkhead, the OHWM is typically located at the bulkhead. OHWM are sometimes difficult to determine on beaches that have no bulkhead without a qualified professional.

“Qualified Wetland Specialist” is a combination of educational, training and work experience such as:

- At a minimum, a **Bachelor of Science or Bachelor of Arts** or equivalent degree in hydrology, soil science, botany, ecology, resource management, or related field. A graduate degree in one of these fields is usually an indication of more advanced expertise.
- At least **two years of full-time work experience** as a wetland professional: including delineating wetlands, preparing wetland reports, conducting function assessments, and developing and implementing mitigation plans. Generally, the more years of experience, the greater the expertise.
- **Completion of additional wetland-specific training programs.** This could include a more comprehensive program or individual workshops on topics such as wetland delineation, function assessment, mitigation design, hydrophytic plant or hydric soil identification.

## **Wetlands:**

Wetlands provide a variety of benefits such as water quality improvement, flood control, carbon sequestration and habitat diversity for plants and animals. Wetlands are inundated or saturated by surface water or groundwater for all or part of the year. Category of wetlands are based between I through IV, with Category I being the highest value and Category IV being the lowest value. [LMC Chapter 14.162](#) defines and describes these protection standards.

Rating the value and function of wetlands to determine the appropriate category are determined by a professional wetland specialist based on several factors such as water quality, hydrology, habitat features and other special characteristics. These reports are also known as a wetland delineation. Protection areas or wetland buffers vary depending on wetland category, proposed land use intensity, as well as wetland functions. Wetlands of different classifications have varying buffers from development so that there is no disturbance to the function of the wetland and the

surrounding ecosystems. These protections are to ensure there is no net loss of the wetlands ecological function, and if a wetland is disturbed or altered, mitigation is required. Please visit [LMC Chapter 14.162](#) for more information on wetland protection and report requirements.

### **Critical Aquifer Recharge Areas:**

Potable water is an essential life sustaining element. Critical aquifer recharge areas are areas with high infiltration rates where contamination is a concern due to the aquifer being a source of drinking water. If a development and proposed land use may pose a contamination risk, a hydrological assessment shall be prepared by a hydrogeologist or geologist. Protection and report standards for aquifer recharge areas can be found in [LMC Chapter 14.150](#).

### **Fish & Wildlife Habitat Conservation Areas:**

Fish and wildlife habitat conservation areas (FWHCA) play an essential role in ecosystem services, provide habitat and assist in climate adaptation. If altered, impacts reduce the likelihood that species will persist over the long term. FWCHAs may include priority habitats and species (Garry Oaks) that are of local importance, sensitive, threatened or endangered.

FWHCAs also include streams which are typed using the Washington State Department of Natural Resource's stream typing classification system. Stream types include:

- Type S: Shorelines of the State and regulated under Lakewood's SMP (Buffer and setback requirements vary depending on shoreline designation, see LMC 16.10.040 for more information)
- Type F: Fish bearing streams (150 ft buffer required)
- Type Np: Non-fish, perennial streams (100ft buffer required)
- Type Ns: Non-fish, seasonal streams (100 buffer required)

Applications with presence of FWHCAs may be required to prepare a habitat assessment prepared by a qualified biologist. If FWHCAs and their associated protection areas are distributed, mitigation will be required. Please visit [LMC Chapter 14.154](#) for more information on FWHCAs protection and report requirements.

### **Geological Hazard Areas:**

Geologically hazardous areas are areas that are susceptible to erosion, landslides and earthquakes. They can also include old mines. These hazards pose a public health and safety risk and may not be suited for development. A geological assessment or



geological technical report may be required if a proposed project has the presence of a geological hazard. Please visit [LMC Chapter 14.146](#) for requirements.

### **Frequently Flooded Areas:**

Flood hazard areas are lands within floodplains that are subject to at least one percent or greater of flooding in a year or within areas subject to flooding due to high groundwater. A hydrological and/or habitat assessment prepared by a qualified professional may be required if a proposed project may impact regulated floodplains. Development requirements may include but not limited to:

- Floodplain development agreement (application)
- Conformance to building code standards for flood resistant construction
- Elevation or floodproofing Certificate

Please refer to [LMC Chapter 14.158](#), [Chapter 18A.50 Flood Hazard Overlay](#) and [Title 15](#) for requirements.

### **Mitigation Sequencing**

Mitigation sequencing is a set of priorities for addressing impacts to all critical area types and are required for development projects that occur near critical areas and their buffer zones. Mitigation is used to offset unavoidable impacts to critical areas by replacing the functions and values lost when critical areas are impacted. Mitigation sequencing strives to first avoid the impact, but if deemed appropriate, a project will be required to minimize the impact or mitigate. Mitigation sequencing is (LMC 14.142.135):

1. Avoid impacts
2. Minimum impacts
3. Rectify or repair impacts
4. Reduce impacts
5. Compensate impacts
6. Monitor impacts

### **Exemptions and Exceptions**

State laws do allow a limited number of exemptions to critical area standards and allowed activities. These exemptions include allowed uses and reasonable use exceptions and differ when a project is located within a shoreline jurisdiction. If critical areas are found to be within the shoreline jurisdiction, a Shoreline Variance application may be required if a project requests to deviate from minimum setbacks or other protection standards. Please refer to Shoreline Permitting Pro Trip for more information.



For more information on critical area exemptions, exceptions, and variances, please contact the City's Planner of the Day at [planning@cityoflakewood.us](mailto:planning@cityoflakewood.us) or schedule a Pre-Application Conference with technical staff.

## More information

- To view Public GIS mapping resources of environmental features please visit <https://city-of-lakewood-gis-cityoflakewood.hub.arcgis.com/>.
- Check out Shoreline Permitting Pro Tip for more information about shoreline permitting and exemptions.
- Check out Tree Preservation and Protection Pro Tip for more information on significant trees.
- Check out SEPA Pro Tip for more information about the State Environmental Policy Act process.
- Check out [LMC Chapter 14.154](#) and [Lakewood's SMP Title 16](#) on critical area protection standards.
- Contact our planning team at [planning@cityoflakewood.us](mailto:planning@cityoflakewood.us) or 253-512-2261.
- Stop by the front counter for customer service, Tuesday-Thursday, 9am-12pm.
- Request a pre-application conference by submitting an application.
- Review [LMC Chapter 18A.20](#) on application intake, review, public noticing procedures and timelines.